

Interview Summary

Application No.

09/832,534

Applicant(s)

ROWE ET AL.

Examiner

Brian P. Werner

Art Unit

2621

All participants (applicant, applicant's representative, PTO personnel):

(1) Brian P. Werner (examiner).

(3) Robert K. Rowe (first named applicant).

(2) Patrick M. Boucher (Reg. 44,037).

(4) _____.

Date of Interview: 12 December 2002; 13 December 2002

Type: a) ☒ Telephonic b) ☐ Video Conference
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.

If Yes, brief description: _____.

Claim(s) discussed: all pending independent claims.

Identification of prior art discussed: Wunderman et al.

Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The examiner faxed the attached suggestions for allowability to applicant's representative for discussion. Upon discussing the suggestions, the examiner, applicant's representation and first named applicant reached an agreement. Changes would be incorporated by examiner's amendment, with full consent of applicant's representative. On 12/13/02, applicant's representative authorized minor changes to correct grammatical errors.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

i) ☒ It is not necessary for applicant to provide a separate record of the substance of the interview (if box is checked).

Unless the paragraph above has been checked, THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.


Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case unless both applicant and examiner agree that the examiner will record same. Where the examiner agrees to record the substance of the interview, or when it is adequately recorded on the Form or in an attachment to the Form, the examiner should check the appropriate box at the bottom of the Form which informs the applicant that the submission of a separate record of the substance of the interview as a supplement to the Form is not required.

It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Attachment to Interview Summary
09/832,534
Paper # 20

Suggestions for Allowability (09/832,534)

The following suggestion (or equivalent thereof) serves to overcome the forthcoming 112 rejections (provided below) and distinguish the claim invention over the prior art. The same (or equivalent) changes would be required of each independent claim. Note: The examiner has not yet looked at the impact on the dependent claims.

Claim 1

Change all instances of "tissue" to - - sub-epidermal tissue - -.

Line 5, after "wavelengths", insert - -

, said plurality of measurement wavelengths being selected by applying a spectral band of optical wavelengths (page 20, first paragraph) to said sub-epidermal tissue and selecting a combination of individual wavelengths of said band (page 14, line 19) emanating from said tissue that are unique to said person (page 14, line 20), and insensitive to environmental and instrumental effects (page 26, line 18) - -

beginning at line 8, after "plurality of measurement", replace "values" with - - wavelengths obtained by applying said spectral band of optical wavelengths to sub-epidermal tissue of said target individual - - and delete " , wherein of illumination light", ending at line 10.

End of suggestion:

112 Issues:

There is no support in the disclosure for identification/verification using wavelengths reflected from the exterior of epidermal tissue (i.e., specular radiation from the skin's surface). In fact, applicant's disclosure teaches away from this (e.g., a blocker blade is used at specification page 18, line 13). This is

a scope of enablement issue. Hence, the suggestion to change "tissue" to - - sub-epidermal tissue - -.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10, 12-44, 46, 47 and 49-52 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The following new limitation (or equivalent) has been added to all of the independent claims:

"wherein said measurement values are correlated with tissue properties that are invariant at a wavelength of illumination light with respect to the presence and intensity of other wavelengths of illumination light"

While this limitation is not fully understood (refer to the 112 second paragraph rejection below), the limitation seems to be defining an act of correlation between the measurement values and tissue properties, where the tissue properties are invariant at a measurement wavelength with respect to other wavelengths of light. This is simply not supported by the original

disclosure. The specification describes “measuring the light intensity received by the output sensor at the various wavelengths which give indications of the absorption at such wavelengths of the infrared energy as a function of the composition of the tissue sample” at page 24, first paragraph. Then, the specification describes choosing the specific measurement wavelengths to fill “the calibration database with intra-person difference spectra” at page 26, line 16. However, the specification does not describe the correlation of measurement values with tissue properties, or the tissue properties as being invariant at a certain wavelength of light in the presence of, and at the intensity levels of other wavelengths of light. Where is this disclosed?

In applicant’s remarks regarding the claim amendments, specification pages 25 and 10 are pointed to as providing support. Keeping in mind the added limitation, specification page 10 does not describe measurement values being correlated with tissue properties that are invariant at a wavelength of illumination light with respect to the presence and intensity of other wavelengths of illumination light. Where is this described at page 10? Specifically, applicant points to lines 16-20. This passage describes the establishment of wavelengths, or “factors”, that are sensitive to “between-person spectral differences”. However, where is the description of “properties that are invariant at a wavelength of illumination light with respect to the presence and intensity of other wavelengths of illumination light”? Now, looking at page 25, applicant points to lines 16+ to page 26, line 6. This passage describes how a difference (or a ratio) between just collected spectral data and previously enrolled spectral data is

taken. However, there is no mention of a correlation between measurement values and tissue properties, and no mention of tissue properties (or measurement values) being invariant at a wavelength of illumination light with respect to the presence and intensity of other wavelengths of illumination light.

Finally, in the applicant's remarks, applicant states that the new limitations are drawn to "the identifications or verifications [being] based on linear optical properties of the tissue". However, there are no claimed elements drawn to "linear optical properties", and it is not clear how the above, new limitation has anything to do with such "linear optical properties". Even if "measurement values that are correlated with linear optical properties of the tissue" as argued by applicant at response page 15 (line 1), the specification does not describe what these "linear" properties are. What linear properties? What is a linear property? Clarification is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10, 12-44, 46, 47 and 49-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant has added the following new limitation (or equivalent) to all of the independent claims:

"wherein said measurement values are correlated with tissue properties that are invariant at a wavelength of illumination light with respect to the presence and intensity of other wavelengths of illumination light"

The examiner is uncertain what is required by this limitation. That is, the new limitation seems to require the measurement values to have some sort of relationship with tissue properties (i.e., a correlation is defined as a causal, complementary, parallel, or reciprocal relationship, especially a structural, functional, or qualitative correspondence between two comparable entities), where the tissue properties do not vary at a wavelength of light with respect to the presence and intensity of other wavelengths of light. In short, the limitation seems to require two distinct things: 1) that the measurement values have a relationship to tissue properties; and 2) that tissue properties do not vary at a certain wavelength of light in the presence of, and at the intensity levels of other wavelengths of light.

However, even in light of this interpretation, the examiner remains uncertain as to the scope of the claim for the following reasons:

A. The new limitation is not supported by the original disclosure as described in the 112 first paragraph rejection above. The specification describes "measuring the light intensity received by the output sensor at the various wavelengths which give indications of the absorption at such wavelengths of the infrared energy as a function of the composition of the tissue sample" at page 24, first paragraph. Then, the specification describes choosing the specific measurement wavelengths to fill "the calibration database with intra-person difference spectra" at page 26, line 16. However, the specification does not describe the correlation of measurement values with tissue properties, or the

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tissue properties as being invariant at a certain wavelength of light in the presence of, and at the intensity levels of other wavelengths of light. Due to this inconsistency between the claim and the original disclosure, the claim is indefinite for this reason alone (see MPEP 2173.03).

B. What is meant by “correlated”? The specification does not discuss a correlation step. The plain meaning of the term is to put or bring into causal, complementary, parallel, or reciprocal relation. If this is the case, does the limitation require that the measurement values and the tissue properties be brought into such a relationship? What kind of relationship? Is the limitation “wherein said measurement values are correlated with tissue properties” a positive step to be performed? Is this limitation requiring an act of correlation?

B. Regarding the new limitation, are the measurement values, the tissue properties, or the correlation “invariant” as claimed? While it appears from the language of the claim that only the tissue properties are invariant, the limitation could reasonably be interpreted to mean that the measurement values are invariant or that the correlation is invariant. Clarification is required.

C. What is meant by “invariant at a wavelength”? What wavelength? Is this a measurement wavelength, corresponding to a specific measurement value made at that wavelength? Clarification is required.

D. What is meant by “invariant ... with respect to the presence and intensity of other wavelengths of illumination light”? What is meant by invariant? Invariant in what way? What is meant by “with respect to ... other wavelengths”? If the tissue properties are invariant, does this mean that the properties of the tissue does not change at a measurement wavelength when other light is present; or does this mean that the measurement values do not change? In the case of the former, tissue has many properties. Which of those properties are invariant? Regarding the “other wavelengths”, the claim does not require other illuminating light. What other wavelengths?

In summary, for at least the above reasons, the requirements (and for that matter, the scope) of the newly added limitation are not understood given the claim in its present form. Clarification is required. Because of the lack of support in the original disclosure, the examiner cannot even guess at what was intended.